## Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

## Listing of Claims

- 1-11 (Canceled):
- 12. (Currently Amended): An image sensing apparatus comprising:
  - a plurality of pixels arrayed in a horizontal and a vertical direction;
- a storage unit configured to store a plurality of one-dimensional correction data in a <a href="https://horizontal.direction">horizontal direction</a> in accordance with a plurality of image ISO sensitivity settings;
  - a setting unit configured to set image ISO sensitivity;
- a calculating unit configured to generate two-dimensional correction data by expanding the one-dimensional correction data in a vertical direction, which is stored in the storage unit;
- a correction unit configured to correct image data outputted from the plurality of pixels by using the two-dimensional correction data generated by the calculating unit; and
- a control unit configured to read the one-dimensional correction data in the horizontal direction from the storage unit in accordance with the image ISO sensitivity set by the setting unit, and control the calculating unit so as to generate the two-dimensional correction data by expanding the read one-dimensional correction data in the vertical direction.
- 13. (Currently amended): A control method for an image sensing apparatus which comprises a plurality of pixels arrayed in a horizontal and a vertical direction, a storage unit

configured to store a plurality of one-dimensional correction data in a horizontal direction in accordance with a plurality of image ISO sensitivity settings, and a setting unit configured to set image ISO sensitivity, the method comprising:

reading the one-dimensional correction data in the horizontal direction from the storage unit in accordance with the image ISO sensitivity set by the setting unit;

generating two-dimensional correction data by expanding the read one-dimensional correction data in a vertical direction;

correcting image data outputted from the plurality of pixels by using the generated twodimensional correction data.